

That which is claimed is:

1. A method of manufacturing a carrier for a rearview mirror assembly, comprising the steps of:

providing a blank to be melted;

5 heating the blank to form a molten blank;

forcing air into the molten blank to form a blowmolded carrier having a hollow space therein;

inserting a stiffening structure in the blowmolded carrier;

cooling the blowmolded carrier to achieve form stability; and

10 inserting a foam element in the hollow space.

2. The method as in Claim 1, further comprising the step of providing the blank with varying thicknesses to achieve varying thicknesses in the carrier.

3. The method as in Claim 1, wherein the hollow space is a plurality of hollow bubbles.

15 4. The method as in Claim 1, wherein the stiffening structure is one of grid-like ribs, tubes, or combinations thereof.

5. The method as in Claim 1, wherein the foam element is shaped complementary to the stiffening structure, the hollow space, and combinations thereof.

6. A method of manufacturing a stiffened, extrusion blowmolded carrier for a rearview mirror assembly, the carrier having a hollow space therein, comprising the steps of:

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providing a plastic blank to be melted;  
heating the blank to form a molten blank;  
forcing the molten blank to form a continuous hollow carrier;  
inserting a stiffening rib in the hollow space;  
5 affixing the stiffening rib in the hollow space to the carrier;  
cooling the carrier to achieve form stability;  
injecting a plastic foam in the hollow space; and  
encapsulating the rib with the plastic foam.

7. A method of manufacturing an injection molded carrier for a rearview mirror  
10 assembly, comprising the steps of:

providing a plastic blank to be melted;  
heating the blank to form a molten blank;  
forming by injection the molten blank into the form of a carrier having a

hollow space therein, the hollow space having a first part and a second part;

15 inserting stiffening tubes and ribs in the hollow space;  
affixing the tubes and ribs in the hollow space to the carrier;  
cooling the carrier to achieve form stability;  
injecting a plastic foam in at least the first part of the hollow space;  
encapsulating the tubes and ribs at least partially with the foam; and  
20 injecting a granulate in at least the second part of the hollow space.

8. The method as in Claim 7, further comprising the step of forming one of the first and second parts to have a plurality of hollow bubbles suspended in a portion of the hollow space and stabilized carrier.

9. A method of manufacturing a rearview mirror assembly for a vehicle, the method  
5 comprising the steps of:

providing a plastic carrier having a first hollow space therein, the first hollow space extending substantially through the majority of the carrier, the carrier having a first and a second side;

attaching a mirror housing to the first side of the carrier;

10 affixing a carrier arm having a proximal end and a distal end to the vehicle, the proximal end affixed to the second side of the carrier opposite the mirror housing, the distal end extending away from the proximal end and configured to attach the carrier to the vehicle, the arm having a second hollow space therein;

affixing a mirror element to the mirror housing; and

15 filling the first hollow space of the carrier and the second hollow space of the carrier arm with a fill material.

10. The method as in Claim 9, further comprising the step of inserting a dividing wall and a hollow bubble in at least one of the first and second hollow spaces.

11. The method as in Claim 10, wherein the hollow bubble is filled with the fill  
20 material.

12. The method as in Claim 9, further comprising the step of placing a second carrier arm substantially parallel to the carrier arm affixed to the vehicle.

13. The method as in Claim 9, further comprising the step of affixing a stiffening structure to the carrier within the first hollow space of the carrier.

5 14. The method as in Claim 13, wherein the stiffening structure is one of grid-like ribs, tubes, and combinations thereof.

15. The method as in Claim 13, wherein the grid-like ribs or tubes intersect each other to form a cage-like structure, the first hollow space disposed apart from the carrying arm.

16. The method as in Claim 9, further comprising the step of forming one of the first  
10 and second parts to have a plurality of hollow bubbles suspended in a portion of the hollow space and stabilized carrier.